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Pennsylvania Department of Environmental Protection
Water Planning Office
P. O. Box 2063
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Via Electronic Submission: http://www.regulations.gov

Water Docket
U.S. Environmental Protection Agency
Mailcode: 28221T
1200 Pennsylvania Ave., NW.
Washington, DC 20460

Re: Comments on the Proposed U.S. Environmental Protection Agency Chesapeake Bay TMDL (Docket EPA-R03-OW-2010-0736) and the Pennsylvania Chesapeake Bay Watershed Implementation Plan

On behalf of its membership comprising thousands of businesses of all sizes and across all industry sectors, the Pennsylvania Chamber of Business & Industry ("Chamber") offers the following comments on the proposed EPA Chesapeake Bay Total Maximum Daily Load ("TMDL") as applied to the Susquehanna and Potomac Basin watersheds within Pennsylvania, and the proposed Pennsylvania Chesapeake Bay Watershed Implementation Plan ("WIP").

As the agencies are aware, the Pennsylvania Chamber has sought throughout the last decade or more to work with other stakeholders in helping to frame workable approaches to addressing the water quality challenges of the Chesapeake Bay. Representatives from the Chamber and individual Chamber members have served on a myriad of numerous committees, subcommittees and stakeholder groups that have devoted literally hundreds of hours to seeking solutions for reducing nutrient loadings in a fair, equitable, cost-effective and implementable manner. We

recognized that all of us have a stake in the Bay, and equally all of those in the Bay watershed (business, communities, citizens and environmental groups alike) should have a strong interest in preserving the economic, as well as environmental, viability and well-being of this region.

1. It is essential that any allocation of nutrient and sediment loadings via either the Pennsylvania WIP or any Backstop TMDL be fair, reasonable, and achievable.

As a starting point, and throughout the TMDL process, it is unquestionably essential that any allocations of nutrient loadings – no matter who establishes such loading targets – must be fair, reasonable and achievable. If the agencies or stakeholders lose sight of this loadstar, if efforts are made to shift burdens arbitrarily between sectors or among individual entities, the entire process is doomed to failure. Given the enormous efforts and investments that are needed to achieve nutrient and sediment reductions, public support is essential. Such public support will never be forthcoming for proposed allocations that are arbitrary, outlandishly expensive and unaffordable, or which ignore constitutional structures and the limitations of governing bodies.

In determining what is fair, reasonable and achievable, EPA and DEP need to consider several embedded questions:

- As part of the big picture, how much does each sector contribute to loadings received by the Bay?
- What measures has each sector already taken to reduce its loadings?
- What steps, commitments, and investments are already in progress – and how will potential changes in direction impact those public and private commitments and investments?
- How well do we understand the existing loadings from each sector or subsector, and the sources of those loadings?
- How will the proposed loading limits impact citizens, taxpayers and business owners – are they affordable, or will they cause community distress, job and investment losses, and unacceptable economic dislocation?
- Within each source sector, are there truly viable actions that can be taken in a cost-effective manner – and then what does it really take to implement those actions, in terms of steps along the way, financial resources, and timing?

One of the observations one might make about some elements of the Pennsylvania WIP and, even more so, the EPA Backstop TMDL, is that some of these questions appear to be unasked and unanswered. Amid extensive prose concerning modeling and descriptions of various governmental programs, these key questions are all too often left unaddressed in a way that allows for thoughtful selection.

2. Built upon a decade of stakeholder involvement, the Pennsylvania WIP comes closest to providing a fair, realistic and achievable approach to nutrient reductions.

No one will claim that the proposed Pennsylvania WIP is perfect; there are clearly some areas for potential improvement. However, a decade of stakeholder dialogue and compromise has lead to a WIP which comes closest to providing a fair, realistic and generally achievable approach to nutrient and sediment reductions over the timeframe to achieve interim objectives by 2017 and longer-term objectives by 2025.

What is most important to understand is that for certain sectors, including significant municipal and industrial point sources, the Pennsylvania WIP represents a series of commitments and courses of action that are already well underway. Although painful and expensive, the Pennsylvania WIP reflects actions that industry and publicly-owned treatment works ("POTWs") have engaged to deliver – with real effort and real dollars expended and committed.

That commitment needs to be viewed in context. The Pennsylvania WIP framework sets specific objectives for nitrogen and phosphorus loadings from major point sources, recognizing that in Pennsylvania all point sources taken together amount to just 12% of all nitrogen loads, 29.6% of all phosphorous loads, and a mere 0.6% of sediment loads generated in Pennsylvania that are delivered to the Bay.[1] Put another way, non-point source loads are and remain the vast majority of nutrient and sediment loadings to the Bay – and even if every sewage treatment plant and industry were to shut down, those non-point source loadings would remain a loading challenge to the Bay.

At this point, all but the non-significant POTWs (those with a design flow < 400,000 gpd) will be covered by cap loads imposed in permits issued by December 31, 2010, with the cap loads for the vast majority of Phase I and 2 systems becoming effective over the next two years. All of these systems are set to achieve agreed upon limits based upon concentrations of 6.0 mg/l of total nitrogen ("TN") and 0.8 mg/l of total phosphorus ("TP") at their design average annual daily flow. And since many, if not all of these plants, are not currently operating at their design flow rates, the actual load delivered to the Bay is anticipated to be somewhat lower.

For all significant industrial discharges, DEP has already proceeded with implementing cap loads through its Chesapeake Bay Industrial Wastewater Compliance Plan dated January 2010 (the "2010 Compliance Plan"), which formed the basis for allocating TN and TP loadings to all major industrial users. Applying the 2010 Compliance Plan, in early March 2010, DEP issued letters to each major industrial facility under 25 Pa. Code §92.8a, requiring the submission of plans and schedules to meet the proposed TN and TP cap loads. Those submissions were due in early September 2010, and we understand that most or all facilities submitted such a plan and

[1] Percentages based on table entitled "Pennsylvania 2009 Nutrient and Sediment Loads Delivered to Chesapeake Bay EPA Phase 5.3 Watershed Model" in the Pennsylvania Chesapeake Watershed Implementation Plan (Sept. 2010) at pg. 13.

schedule. Based on information from Chamber members, those facilities are already underway with investments – in some cases significant investments – to meet the cap loads proposed by DEP even in advance of those cap loads actually appearing in final NPDES permits.

The fact that these commitments have been made, and that such expenditures are already underway, is a crucial consideration in framing any WIP or TMDL. Once such commitments are made and projects are underway – as is the case with many communities and industries – one cannot simply change directions and objectives. One of the corollary requirements of "fair, reasonable, and achievable" is predictability and consistency. Municipalities and industries cannot be expected to commit and expend hundreds of millions of dollars (and taxpayers and consumers cannot be expected to ultimately pay the price of such investments), only to face a governmental "bait-and-switch" that renders such commitments a nullity and investments a waste of resources.

For business, this issue is particularly acute. As one of our Chamber members stated aptly: "We are willing to do our part, but it is not easy." The investments being made by significant industrial facilities in the basin must be viewed in the context of a business climate that is best described as extremely challenging -- where virtually all entities have been affected by a recession of global dimensions, and where efforts to preserve employment have been seriously strained. Many of our Chamber members are enduring costs that cannot be readily passed on to customers, given the nature of global competition and the minimum margins allowed in a competitive market – where producers in other regions or other parts of the world do not face such costs.

3. The proposal in the EPA Backstop TMDL to arbitrarily move loading reductions from non-point sources to municipal and industrial wastewater facilities is fundamentally unfair, unrealistic and unachievable.

While the Pennsylvania WIP attempted to allocate reductions fairly among all sectors, EPA has taken a position in its Backstop TMDL that can only be described as irrational, unattainable, arbitrary and counterproductive.

In comments dated September 27, 2010, EPA purported to find that the Pennsylvania WIP was deficient in failing to provide "reasonable assurance" that the reductions would be achieved in all identified sectors. In particular, EPA claimed that the actions identified to address non-point sources, such as agriculture, stormwater, forests and on-lot septic systems, were not adequately described or sufficient. To address these "gaps", instead of framing actions to address the sectors that allegedly are not doing their share, EPA has proposed in its "Backstop TMDL" to impose a wholesale shift of the burden of reductions from these non-point sectors to municipal treatment plants and industries.

Under EPA's proposed Backstop TMDL, EPA proposes to push every municipal treatment plant to the "limits of technology" and for industries, proposes to push beyond that to levels that are well beyond any known technology.

EPA has described the limits of technology for POTWs as achieving 3 mg/l of nitrogen and 0.1 mg/l of phosphorus – although there are in fact very few treatment plants in the U.S. that have achieved those concentrations consistently. Pushing every municipal sewage plant to the extreme limits of technology will engender billions of additional dollars in investment, while the reductions in additional loadings are actually quite marginal. The Pennsylvania Municipal Authorities Association estimates an additional $3-4 billion in capital requirements, over and above what our municipalities are already committed to expend. Further, changing course at this late date, after many municipalities have already designed and launched the process for modifying their facilities to meet the numbers in the Pennsylvania WIP, threatens to waste precious public dollars, and impose even more burdensome demands on municipal rate payers. Given the fiscal situation faced by many Pennsylvania communities during the slow recession recovery period, it is far from clear if or how they could access capital markets to meet such funding requirements. Indeed, some of the key communities in this watershed are already in "distressed municipality" status.

But EPA's approach to industry is even more unreasonable and arbitrary. Clearly without taking any time to evaluate the industries involved, or what measures they each have in fact already put in place to reduce nutrients, EPA performed what can only be described as an arbitrary, capricious and wholly unscientific formulaic exercise. EPA explains that the method used to come up with the numbers in the Backstop TMDL made "the assumption that the loads are reduced below the loads identified in the jurisdiction's draft Phase 1 WIP at a rate equivalent to significant municipal WWTPs going from the WIP loading level to an E3 loading level (down to 3 mg/L TN and 0.1 mg/L TP)". In translation, EPA calculated an average percentage reduction in loadings that municipal wastewater treatment plants might make to achieve the limits of technology, and then applied the same percentage to every industry – irrespective of the current situation at each industry, and irrespective of whether their situation was anything at all like a municipal treatment plant.

The astonishing results are buried in Table Q2 of the EPA TMDL, in a manner that only the very dedicated few could even find them, and arrayed in a manner that even fewer could understand what they mean. What Chamber members have found in Table Q2 is nothing short of disastrous, irrational and unimplementable. As examples:

- For one Chamber member in the inorganic chemicals business – an entity that just five years ago won awards for voluntarily reducing nitrogen loads by over 1 million pounds per year – EPA has proposed to reduce Total Nitrogen loadings from the level that the Pennsylvania WIP assigns (600,515 lbs/year) to just 3,693 lb/year, and to reduce Total Phosphorus loads from the Pennsylvania WIP value (1,577 lb/year) to 31 lb/year. Based on that facility's flow rates, the EPA Backstop TMDL would equate to requiring a TN concentration of around 1 mg/l or less, and a TP concentration of less than 0.01 mg/l. These resulting concentration values are well beyond (indeed, for phosphorus, one order of magnitude below) what EPA itself has acknowledged are the limits of technology.

This Chamber member has candidly advised that if EPA is successful in imposing such limits, a shutdown of the facility – and the unemployment of some 900 workers – is the only viable option.

- For another Chamber member in the pharmaceutical industry, EPA has assigned backstop TMDL loadings of 9,050 lbs/year Total Nitrogen and 188 pounds/year Total Phosphorus, versus PA WIP loadings of 44,497 pounds/year TN and 11,748 pounds/year TP. Based on the flows at this industry, the proposed backstop effluent concentrations would be 1.42 mg/l TN and 0.03 mg/l TP. As before, these concentrations are orders of magnitude less than the "limits of technology" limits of 3 mg/l TN and 0.1 mg/l TP. This represents a significant discrepancy.

  Furthermore, Section 8, pg. 8-16 of the draft TMDL states that for industrial backstop loadings, "the WLAs for industrial WWTPs make the assumption that the loads are reduced below the loads identified in the jurisdiction's draft Phase 1 WIP at a rate equivalent to significant municipal WWTPs going from the WIP loading level to an E3 loading level (down to 3 mg/L TN and 0.1 mg/L TP)." PA's WIP loading level for significant municipal WWTPs is 6 mg/L TN and 0.8 mg/L TP. Following the rationale presented in Section 8, pg 8-16, significant industrial WWTP's in Pennsylvania would be required to reduce TN levels by 50% and TP levels by 87.5% from what was presented in the WIP. For this pharmaceutical company, this would equate to backstop WLA's of 22,248 pounds/year TN and 1,468 pounds/year TP based on the pharmaceutical company's flows. Again, the backstop WLA's in Table Q-2 of the draft TMDL are 9,050 pounds/year TN and 188 pounds/year TP, presenting a significant discrepancy with the rationale on page 8-16. And again, we request EPA explain these significant discrepancies.

  Table 9-4 of Chapter 9 of the draft TMDL presents individual WLA's based on Chesapeake Bay water quality standards. The WLA's for this same Chamber member are 21,595 lbs/year TN and 450 lbs/year TP. Based on the member's flows, these mass loads equate to concentrations of 3.4 mg/l TN and 0.07 mg/l TP, which are in fact closer to the proposed backstop TMDL concentrations of 3 mg/l TN and 0.1 mg/l TP than the backstop WLA's in Appendix Q-2.

  The Chamber member is extremely confused and concerned about this glaring and seemingly widespread discrepancy between the loadings that EPA indicated they were intending to publish and what actually appeared in Tables 9-4 and Q-2.

  In addition to TN and TP loadings, Table Q-2 of the draft TMDL assigns a backstop sediment load of 121,498 pounds/year. This is a reduction from this company's current effluent sediment load of 13,070 pounds/month (156,840 pounds/year) as established by pharmaceutical effluent limit guidelines. What is

EPA's technical basis for the draft TMDL sediment loading, especially considering that the pharmaceutical ELG load has been established as Best Available Technology (BAT) for the pharmaceutical industry?

- These discrepancies and disparities are again exemplified in the backstop TMDL for a consumer products manufacturing industry located in the Susquehanna watershed. This industry has been a leader in the reduction of nutrients in their wastewater effluent. They have voluntary reduced nitrogen discharge loads by 40% since 1995, and 88% since 1985, resulting in total nitrogen removal of 640,000 pounds/year. These voluntary reductions resulted in this industry being recognized with a significant achievement award by the Chesapeake Bay Program's "Businesses for the Bay," and a Pennsylvania Governor's Waste Minimization Award. Annual nitrogen discharge loads are now less than 100,000 pounds. This industry was a critical partner with the introduction of legislation (phosphorus reduction to municipal sewage treatment plants via reformulation of dishwasher detergents), and reformulated their brand of dishwasher detergent to remove phosphorus.

  The backstop TMDL loads in Appendix Q2 for this industry represent loadings that are significantly less than the loads than can be achieved by the limits of technology, and result in effluent concentrations that are orders of magnitude less than the published backstop TMDL concentrations of 3 mg/l TN and 0.1 mg/l TP. The backstop TMDL loads in Appendix Q2 are 34,232 pounds/year TN and 292 pounds/year TP. Based on these backstop TMDL loads, the calculated effluent concentrations are 1.46 mg/l TN and 0.012 mg/l TP using the industry's current actual discharge flow rates (less than the industry's rated flow rates). As with the previous examples, this is a glaring discrepancy with EPA's proposed backstop TMDL concentrations.

  The proposed loads for this industry in the Pennsylvania WIP are 100,360 pounds/year TN and 5,441 pounds/year TP. EPA's proposed backstop TMDL would require an additional 66% reduction in nitrogen and 95% reduction in phosphorus compared to the loads in the Pennsylvania WIP, and would require technology that far exceeds the supposed "limits of technology." For an industry that has been a proactive leader in the voluntary reduction of effluent nutrient loadings, these additional proposed load reductions pose no value to the Bay, no cost-value for the industry, and in general just make no sense even if they had been calculated correctly.

- These severe discrepancies in the draft TMDL are not isolated to just industry. A Pennsylvania municipal wastewater treatment plant (POTW) has also noticed substantial calculation and/or waste load allocation discrepancies in their proposed backstop TMDL loadings. This POTW just completed an $11 million

upgrade to meet TN and TP limits mandated by PA DEP as part of their NPDES permit renewal. This plant upgrade expenditure resulted in a 67% increase in sewer bills for their rate payers. The new limits for the POTW are 6 mg/l TN and 0.8 mg/l TP, which are the effluent limits in the PA WIP. Based on the POTW's flow, these effluent limits equal mass loadings of 22,228 pounds/year TN and 2,963 pounds/year TP. In Appendix Q2, EPA has proposed backstop TMDL loadings of 4,695 pounds/year TN and 97 pounds/year TP. Not only do these proposed backstop loadings represent reductions of 78.9% TN and 96.7% TP from PA WIP limits just achieved through considerable expense, but they also equate to concentration limits of 1.34 mg/l TN and 0.026 mg/l TP. As with all of the prior examples, the proposed backstop loadings in Appendix Q2 for this POTW are orders of magnitude lower than EPA's intended backstop loading concentrations of 3 mg/l TN and 0.1 mg/l TP. Even if the Appendix Q2 backstop loadings had been calculated correctly, a requirement for this POTW to reduce effluent loads further than achieved by their $11 million upgrade (and significant sewer rate increase) is completely ludicrous, unfair, and present minimal value to the Bay.

The EPA Backstop TMDL suggests that perhaps the difference between the Table Q2 values and what is technically or economically achievable could be made up by purchasing credits. Such statements are mere fiction. As EPA well knows, there are nowhere near the number of credits available or predicted to be available to cover the differences between the Pennsylvania WIP loadings for point sources and the Backstop TMDL values. Moreover, EPA's other comments on the Pennsylvania WIP draw into serious question whether Pennsylvania's credit trading program will remain viable.

At the same time, EPA's approach to setting cap loads for non-significant industries, without any facts, is unreasonable and doomed to failure. While the Pennsylvania WIP rationally targets loading reductions on significant dischargers, EPA proposes to extend nitrogen and phosphorus caps to each and every industry in the watershed, no matter how small. EPA's approach is unfair, irrational, and threatens the employment base of this Commonwealth.

The nutrient values listed in EPA's Backstop TMDL for non-significant industrial dischargers were developed in the absence of data, since in most cases these small discharges have not yet been subject to TN or TP monitoring. Thus, unburdened by facts, EPA pushed forward to assign TN and TP values – burying them in a table that almost no one except the most sophisticated user could discern. For many small facilities, the TN and TP values are simply listed as zero.

Taken together, such non-significant discharges are expected to contribute only a minor fraction of the TN and TP loadings to the Bay – a fraction that is so low that the Pennsylvania DEP rationally decided they simply did not warrant regulation at this time. Skewing such logic, EPA

would nevertheless like to proceed to impose "zero" values, irrespective of the consequences, in order to satisfy an entirely bureaucratic compulsion to "regulate everything."

The imposition of unachievable "zero" limitations – mandated to become effective the next time each facility's NPDES permit is renewed -- will inevitably result in shutdown of those facilities.

It is hard to understand how a Federal Administration so vocally and repeatedly pledged to the preservation and recovery of employment would even conceive of such a proposal. Instead of trying to address the Bay's needs in a balanced and rational manner, EPA is simply proposing to punish those already doing their fair share. Creating a train wreck through the imposition of impossible and draconian mandates is not the way to achieve real Bay improvements.

4. A viable approach to stormwater management that recognizes Pennsylvania's unique governmental structure is imperative.

Pennsylvania has a local governmental structure that is not like many states, and any approach that is aimed at addressing local sources of nutrients and sediments must be cognizant of, and be framed to work within, that governmental structure.

Urban and stormwater is a case in point.

EPA has criticized the Pennsylvania WIP for failure to expand the so-called MS4 program to seek stormwater control via imposition of limitations and requirements in NPDES permits issued to municipalities and municipal authorities that operate storm sewer systems. EPA's fixation on the MS4 program, to the exclusion of other approaches, demonstrates a fundamental misunderstanding of what such storm sewer system operators can and cannot do.

In many if not most cases, stormwater systems are not operated by units of general government, but rather by municipal authorities. Such authorities have limited powers to finance, construe and implement infrastructure projects, but they do not possess general police powers, land use control authority, or other legal tools to regulate the sources of nutrients or sediment that may become entrained in and flow as part of stormwater entering their sewer lines. Moreover, under the Pennsylvania Constitution Article III, §31, municipal authorities do not have general taxation powers, and can only establish fees and charges to pay for services provided by the infrastructure they operate.

Recognizing this situation, Pennsylvania's approach to addressing stormwater must proceed in a different direction, combining the authorities contained in different programs to work on the ultimate problem. For this reason, the Pennsylvania WIP relies on the combination of (i) county-adopted watershed stormwater management plans prepared under the Pennsylvania Stormwater Management Act; (ii) statutory-mandates that municipalities adopt and administer ordinances that implement those watershed stormwater management plans; and (iii) the state level Ch. 102 erosion and sedimentation control permitting program, including its mandates for post-construction stormwater management plans. In our view, this is the only viable approach given

Pennsylvania's governmental structure – and EPA's apparent insistence (despite the law) to drive use of the MS4 program is akin to assuming that the hammer in hand is the only tool in the tool box, and therefore must be used to drive a screw. EPA needs to take its blinders off, and stop just looking at the Clean Water Act as if it were the only tool kit. The Pennsylvania WIP points to other tool kits, and in many cases those tools are the only ones that hold real promise of achieving effective results.

5. The path forward must be positive, not punitive.

Industry, municipalities, and the public can only support a watershed implementation approach that fairly distributes responsibilities – where all contribute to the solution, and with actions that are reasonable and cost-effective.

Throwing out the Pennsylvania WIP to impose a Backstop TMDL containing impossible and draconian mandates on December 31, 2010 will not achieve anything other than to create a train wreck. Such a track is not a viable pathway to achieve real Bay improvements. As our region and nation struggle to come out of the greatest economic downturn since the crash of 1929, now is not the time to waste time, taxpayer funds, and private resources – and it is not the time to take regulatory decisions that threaten to shut down industrial plants and displace employment.

We believe the Pennsylvania WIP is generally on the right track. To the extent that implementation steps and programs for certain non-point sectors need to be fleshed out in further detail, EPA must give the Commonwealth sufficient time to work out those details.
We appreciate the opportunity to provide these comments, and hope that our efforts along with those of other stakeholders involved in the Pennsylvania WIP process will lead to a plan that is viable, positive and acceptable as a path forward.

Respectfully submitted,

Floyd Warner
President